REMARKS

Claims 38, 40-49, 54, 55, 57, and 58 are pending in the application. Claims 38, 40-49, 54, 55, 57, and 58 have been amended. No claim has been canceled with this amendment and no claim has been added. Therefore, claims 38, 40-49, 54, 55, 57, and 58 will remain pending in the application after entry of the foregoing claim amendments. Support for the amendments is found in the specification, drawings, and claims as originally filed. Applicants respectfully submit that no new matter has been added.

Interview Summary

Applicants gratefully acknowledge the time and attention afforded by Examiner Colan during a telephonic interview on February 19, 2009. The Examiner stated that the proposed amendments, contained herein, likely, adequately address the rejection under 35 U.S.C. § 101 and 35 U.S.C. § 103, but that a further review of the cited art was required.

Objection to Specification

The specification is objected to as allegedly failing to provide proper antecedent basis for the claimed "computer readable medium." This objection is traversed in view of the disclosure at paragraph [0112] of "a storage medium readable by the processor" including instructions for implementing the invention. Applicant further notes that examples are provided throughout the specification of processes and algorithms for "serializing" or otherwise processing the objects. See, for example, paragraphs [0077], [0102], [0104], and Appendix A. Withdrawal of the objection to the specification is solicited.

Claim Rejections – 35 U.S.C § 101

Claims 38, 40-49, 54, 55, 57, and 58 stand rejected under 35 U.S.C § 101 as being directed to non-statutory subject matter. (Office Action dated November 24, 2008 ("Office Action"), page 3, ¶ 2). Applicants respectfully traverse the rejections. Applicants have amended the claims to recite a "computer-readable ***storage*** medium bearing a computer readable representation of an object and ***computer executable instructions that when***

executed by a processor cause the object to be serialized for efficient retrieval by computer hardware. As noted in the present specification:

> Finally, it should be understood that the various techniques described herein may be implemented in connection with hardware or software or, where appropriate, with a combination of both. Thus, the methods and apparatus of the present invention, or certain aspects or portions thereof, may take the form of program code (i.e., instructions) embodied **in tangible media, such as floppy diskettes, CD-ROMs, hard drives, or any other machine-readable storage medium** wherein, when the program code is loaded into and executed by a machine, such as a computer, the machine becomes an apparatus for practicing the invention. In the case of program code execution on programmable computers, the computing device generally includes a processor, a storage medium readable by the processor (including volatile and non-volatile memory and/or storage elements), at least one input device, and at least one output device. One or more programs that may implement or utilize the user interface techniques of the present invention, e.g., through the use of a data processing API, reusable controls, or the like, are preferably implemented in a high level procedural or object oriented programming language to communicate with a computer system. However, the program(s) can be implemented in assembly or machine language, if desired. In any case, the language may be a compiled or interpreted language, and combined with hardware implementations.

(*Specification* at ¶ [0112]) (emphasis added).

Claims directed to a "computer readable storage medium" are believed to be patentable subject matter pursuant to the holding of *In re Lowry*, 32 F.3d 1579 (Fed. Cir. 1994). Accordingly, Applicants respectfully submit that claims 38, 40-49, 54, 55, 57, and 58 are directed to statutory subject matter. Applicants respectfully request, therefore, withdrawal of the rejection of claims 38, 40-49, 54, 55, 57, and 58 under 35 U.S.C. § 101.

Claim Rejections – 35 U.S.C § 103

Claims 38 and 44 stand rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Bennion et al., U.S. Pat. No. 5,634,123 (hereinafter "Bennion"). Although Applicants believe that the present claims patentably define over Bennion, Applicants have amended the claims to further clarify the claimed subject matter.

The cited portions of Bennion fail to disclose or suggest the specific combination of claim 38 as amended. For example, the cited portions of Bennion fail to disclose or suggest

that "the binary fragment header comprises a type field including a number of fragment property bits including a member type bit indicating if all members are primitives, and a self-terminating bit indicating if the associated object is represented within one fragment" as now recited in claim 38.

In the Official Action, the examiner acknowledges that Bennion does not teach a self-terminating bit (*i.e.*, a type field indicating that the binary fragment is the only fragment of the object). See Office Action, page 25, ¶2. For such a teaching, the examiner relies on Roy et al., U.S. Pat. No. 6,631,130 (hereinafter "Roy"). Instead the examiner alleges that the following teachings of Roy render this feature obvious:

> The remaining sixty-eight bits of the PDU are used for various other addressing information such as indicating whether the PDU contains an ATM cell, a packet, or a control message, whether reassembly of the packet should be aborted, whether the payload is a first fragment, middle fragment or last fragment, how many payload bytes are in the last fragment, the fragment sequence count, and a destination flow identifier.

(Roy, col. 3, lines 52-59)

The examiner further alleges in the Official Action that the teaching in Roy of using some of the remaining 68 bits to indicate whether a payload is a first bit, a middle bit, or a last bit renders obvious having a bit in the type field to indicate that the binary fragment is the only fragment of the object. However, Roy is directed to a switching scheme for network transmission that accommodates ATM and Packet connections. In Roy, a PDU is provided with sufficient payload to carry an ATM cell or a larger packet after fragmentation. Packet fragmentation implies that the packet size has exceeded the maximum transmission unit size (*e.g.*, 52 bytes). The packet is then divided into multiple smaller packets (*i.e.*, fragments) for transmission. Upon packet fragmentation, therefore, there will be at least two fragments associated with the packet. The teachings of Roy of using some bits to indicate a first, middle, and last is appropriate in a packet fragmentation context. However, in the scheme disclosed in Roy, there is no instance where a fragmented packet is within one PDU and therefore, no rationale is provided by Roy for having a bit to indicate this.

Moreover, the feature of a self-termination bit is inconsistent with the hierarchical structure of Bennion as characterized in the Office Action. In Bennion, a bit indicating if the associated object is represented within one fragment would be incompatible with Bennion. For example, in Bennion, an object (*e.g.*, Company record 600 (referenced as 603 in Figure 6)), is represented by a nested data structure that includes a data-containing record and a container record that specifies the length of all of the data-containing records of the container record as well as the length of the container record itself. Therefore, the end of a record, or object, is discernible by reference to the container record of the hierarchical structure to which the object belongs. Accordingly, there is no need for the data-containing record to be referenced to determine the end of a record. See Bennion, col. 6, lines 23-42, and Figure 4. Additionally, the record is not represented within one fragment (*e.g.*, a data-containing record) as the container record is also required to represent the object.

Thus, the cited portions of Bennion and Roy, alone or in combination, fail to disclose or suggest these features of claim 38. Accordingly, Applicants respectfully submit that claim 38 patentably defines over Bennion and Roy. As claims 40-48 depend from claim 38, Applicants further submit that claims 40-48 patentably define over Bennion and Roy at least by virtue of their dependence from claim 38.

The subject matter of claim 38 discussed above is similarly recited in independent claims 49, 55, and 58. Therefore, Applicants respectfully submit that claims 49, 55, and 58 patentably define over Bennion and Roy for at least the same reasons as claim 38. As claims 54 and 57 depend from claims 49 and 55, Applicants further submit that claims 54 and 57 patentably define over Bennion and Roy at least by virtue of their dependence from claims 49 and 55.

Applicants respectfully submit that the additional cited references, likewise, fail to disclose or suggest the claimed features discussed above. U.S. Pub. No. 20040220946 to Krishnaprasad et al. (hereinafter "Krishnaprasad") is cited in the Office Action as allegedly teaching a large object (LOB) fragment. See Office Action, page 8 ¶ 4. U.S. Pat. No. 6,904,454 to Stickler (hereinafter "Stickler") is cited in the Office Action as allegedly teaching a bit field that indicates whether an order exists among two or more collection element fragments. See Office Action, page 13 ¶ 3. U.S. Pat. No. 6,012,067 to Sarkar (hereinafter "Sarkar") is cited in the Office Action as allegedly teaching a value type field that

indicates whether a payload of the LOB fragment includes an inline LOB or a pointer to a LOB location. See Office Action, page 19 ¶ 2.

Thus, the alleged teachings of Krishnaprasad, Sarkar, and Stickler fail to remedy the defects of Bennion and Roy discussed above.

Accordingly, for at least the foregoing reasons, Applicants respectfully request withdrawal of the rejection of claims 38, 40-49, 54, 55, 57, and 58 under 35 U.S.C. § 103(a).

CONCLUSION

In view of the foregoing, Applicants respectfully submit that the claims are allowable and that the present application is in condition for allowance. Entry of the above amendments, reconsideration of the application and a Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Michael P. Dunnam, at (215) 564-8962 to discuss the resolution of any remaining issues.

Date: February 24, 2009

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